

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 00603

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H03F3/08 G11B7/13

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H03F G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 981 936 A (FUJII KAZUHIKO) 9 November 1999 (1999-11-09)	1,2, 9-13,15, 18-24
Y	column 6, line 27 -column 8, line 7; figures 5,10A,10B	3-8,14, 16,17
X	US 4 555 623 A (LARSON ROGER ET AL) 26 November 1985 (1985-11-26)	1,22
Y	column 4, line 63-66; figure 2 column 5, line 56 -column 6, line 17	3-8,14, 16,17
X	US 5 057 682 A (MICHON GERALD J ET AL) 15 October 1991 (1991-10-15)	1,2,9,22
A	column 8, line 3 -column 9, line 25; figures 3,4	3-8,14, 16,17
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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& document member of the same patent family

Date of the actual completion of the international search

18 February 2004

Date of mailing of the international search report

27/02/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 5 606 277 A (FELIZ GEORGE F) 25 February 1997 (1997-02-25) column 4, line 25 -column 6, line 8; figure 3 ---	1,9,22 2-8, 10-24
X A	US 5 602 511 A (WOOLAWAY JAMES T) 11 February 1997 (1997-02-11) column 2, line 46 -column 4, line 16; figure 2 ---	1,2,22 3-8,14, 16,17
X A	US 6 329 881 B1 (TACHIGORI MASASHI) 11 December 2001 (2001-12-11) column 1, line 14-51; figures 7,16 column 7, line 30-50 ---	1,22 2-24
X A	DE 198 38 693 A (MAZ MIKROELEKTRONIK ANWENDUNGS) 23 March 2000 (2000-03-23) column 1, line 41 -column 2, line 4; figure 3 -----	9 1-8, 10-24

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP/03/00603

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5981936	A	09-11-1999	JP 10256841 A CN 1193790 A , B	25-09-1998 23-09-1998
US 4555623	A	26-11-1985	AT 56103 T DE 3483102 D1 EP 0165312 A1 JP 61500636 T WO 8502713 A1	15-09-1990 04-10-1990 27-12-1985 03-04-1986 20-06-1985
US 5057682	A	15-10-1991	NONE	
US 5606277	A	25-02-1997	NONE	
US 5602511	A	11-02-1997	NONE	
US 6329881	B1	11-12-2001	JP 3475877 B2 JP 2001127560 A	10-12-2003 11-05-2001
DE 19838693	A	23-03-2000	DE 19838693 A1	23-03-2000